EXPERIMENTAL METHOD TOWARD IN-SITU BURIAL AND FLORAL RESTORATION OF CONTAMINATED SITES IN SUBMERGED WETLANDS.

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Empirical data indicate that AquaBlok - a patented, bentonite composite-aggregate technology, can serve as a benthic substrate for aquatic vegetation while simultaneously acting as a physical barrier between contaminated sediments and overlying biological receptors. The objectives of this research is to 1) evaluate the effectiveness of AquaBlok pellet (SubmerSeed) to sink the incorporated seeds below the surface and become integrated into the soil and/or hydrated AquaBlok cap, 2) evaluate the ability of plants to utilize AquaBlok as an alternative to sediment, 3) determine if adding organic matter improved AquaBlok's suitability as a substrate, 4) evaluate the effectiveness of AquaBlok as a physical barrier between contaminated sediments and plant tissue. Preliminary green-house study results have demonstrated that successful herbaceous emergent wetland plant establishment and growth from deposited and specially treated seed stock occurs within a hydrated AquaBlok substrate.